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# Recruitment, Selection and Retention of Nursing and Midwifery Students in Scottish Universities

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## **RECRUITMENT, SELECTION AND RETENTION OF NURSING AND MIDWIFERY STUDENTS IN SCOTTISH UNIVERSITIES**

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## **INTRODUCTION**

An increasing demand for healthcare alongside an ever growing number of older people has led to a worldwide shortage of nurses. This is a concern internationally and has been addressed in part by an increase in the numbers of students recruited to pre-registration programmes (Pitt et al 2012). However this strategy relies on students completing programmes in sufficient numbers.

High attrition rates from pre-registration nursing and midwifery programmes have been reported. In the United States (US) attrition from Associate Degree programmes has been reported at 42% (Fraher et al 2010), whilst other countries such as New Zealand (Knight et al 2012) Australia (Gaynor et al 2008) and developing countries (WHO 2010) have also reported student nurse attrition as a serious concern to be addressed. Current United Kingdom (UK) figures indicate attrition rates of 25-30%, and Scottish figures for the 2006/7 intake were reported as 26.3% (ISD, 2011). Attrition rates for individual Higher Education Institutions (HEIs) have previously been reported at 51%, with several English HEIs at above 30% (Lister 2009). These figures are significantly higher than those for the general student population where around 7 to 8% of students fail to progress to second year (HESA 2011). However, within the UK, pre-registration nursing students differ from the general student population in a number of ways: they are a significantly older cohort; have access to a bursary and other benefits; they undertake 50% of their programme on clinical placements outside their academic institution.

There is a notion that, if the right candidates are attracted and subsequently selected at interview, then retention would be less of an issue and more candidates would go on to successfully complete pre-registration nursing and midwifery programmes (hereafter referred to as programmes). Such a notion is based on three assumptions. Firstly, there are 'ideal types' out there waiting to be recruited and selected. Secondly, these 'ideal types' can be identified through selection processes. Finally, once the ideal candidate is selected they will complete the programme. There is, however, only a limited evidence base upon which to base recruitment, selection and retention (RSR) strategies.

In response to the high attrition rates in Scotland, the Scottish Government Health Directorate (SGHD) set up a Delivery Group to focus on RSR to pre-registration programmes. This national approach to the development of RSR strategies is predicated upon the idea that reasons for attrition are multi-factorial (SGHD, 2007). As part of the work undertaken by the Delivery Group, this paper reports the findings of a benchmarking exercise in RSR practices in programmes in HEIs in Scotland. The aim of the study was to identify best practice and integrate this with what was known in the literature. Findings were subsequently used in the development of a 'Best Practice Statement'.

## **BACKGROUND**

### **Recruitment**

The context of pre-registration nurse and midwifery education in the UK has changed over the past 15 years with moves to higher education and national reforms in curricula. Further, it has been suggested that devolution has led to an increasing divergence between Scotland's approach to both healthcare and Higher Education provision and that of the other three UK countries. Sabin et al (2012) identify that this

has led to a desire to develop approaches to commissioning nursing and midwifery programme provision which respond to the different national health priorities and particular operational, geographical and social contexts of the student and workforce populations. In Scotland, all pre-registration nursing and midwifery education is delivered by universities as a three year programme leading to a bachelor's degree or a four year honours degree programme.

Buchan (2002) identified that developments in medical science, technologies and models of healthcare delivery alongside an ageing workforce and other post-registration attrition problems have created increasing and consistent demands for (possibly more, and arguably better educated) nurses (Murray 2002, Aiken et al. 2003). However, it has been suggested that easier access to higher education and a plethora of other courses and careers may have contributed to making nursing a less traditional or obvious and attractive career choice than in the past. Buerhaus et al (2005) suggest that in the US, 35% of high school students were less likely to pursue a career in nursing in the 1990s than in the previous two decades.

In this context, the aim of recruitment is to produce a pool of candidates from which to select if necessary (Land 1993). Lindop (1987) identified the central role of expectations and perceptions of nursing/midwifery and pre-registration education for recruitment and retention. Perceptions may be denotative; shared by a group or society or connotative; experiential, e.g. personal (Perry, 1985). Thus, potential nursing students' perceptions may be influenced by the media, friends, family and career advisors. Studies have identified that nursing students perceive nursing as a caring profession (Kersten et al, 1991; Rawlins et al, 1991); and cite family and friends (Kersten et al, 1991; Rawlins et al, 1991), experiential or secondary knowledge of nursing through a family illness or 'knowing a nurse' (Larsen et al, 2003), role models (Grossman et al, 1999) and information and advice from practising nurses (Buerhaus et al, 2005) as influencing choice of nursing as a career.

Recent economic changes in the UK have been implicated as a key factor in influencing recruitment and retention in nursing and midwifery programmes. There is some evidence that attrition rates may be starting to fall (Centre for Workforce Intelligence 2012; RCN Scotland 2012; Sabin et al 2012). Applications to nursing in the UK were rising in 2010 and 2011 (Buchan & Seccombe 2010, UCAS 2011) but remained static in 2012 (UCAS 2012). Against this background the Scottish Government's commissioned annual target numbers for pre-registration programmes have been gradually reduced from 3325 in 2007/8 to 2700 in 2012/13. Together these changes have created a shift in emphasis from recruitment to selection.

## **Selection**

Education providers and potential employers have expectations and perceptions of the person they wish to appoint, resulting in attempts to identify key characteristics or skills required in nursing candidates.

Buckingham and Mayock (1994) describe a study to identify characteristics of successful nurses for the purpose of informing selection. Successful nurses were defined as those rated as outstanding by their managers, and included nurse educators and managers. However, the characteristics of this group of qualified nurses may not be what is required in new recruits to programmes, may be developed through the programme, or may not be achievable by all new recruits.

In a further attempt to define the qualities required in nursing recruits Price (1999) developed some hypothetical candidates and asked HEIs to rate their suitability for interview based upon other nurses' identified qualities. This study suggested that motivation, experience and knowledge of nursing as a career are the key elements sought by selection panels. A further study by Price (2000) produced 'key selection criteria' based upon literature specific to children's nursing. These included observational, psychomotor, interpersonal and motivational skills. Only one third of HEIs reviewed rated motivational skills as important. None of the other 'key selection criteria' were rated at all leading Price (2000) to suggest there is a need to agree the qualities required to be a nurse via a person specification.

Development of person specification through job analysis has been attempted in nursing, but is difficult due to the varied nature of nursing work. Land (1993) argues that breaking down nursing into a set of tasks or skills does not sufficiently represent its complexity nor does anything for its occupational status.

Face to face interviews are a requirement for entry onto programmes in the UK (Nursing and Midwifery Council, 2010). However there is no strong evidence to support the predictive value of interviewing as a mode of selection (Land 1993, Ehrenfield and Tabak 2000, Salvatori 2001, Kreiter et al 2004, Basco et al 2008). Salvatori (2001) argues that interviews are highly prevalent but variable with poor reliability, poor predictive validity and low cost-effectiveness. Ehrenfield and Tabak (2000) identified difficulties in standardisation of interviews, and that candidates said what they thought interviewers wanted to hear. Scoring candidates against predetermined criteria is subjective. Donaldson et al (2010) studied the development of an interview score sheet. They found that age and standard of written work completed at interview were the best predictors of success at the end of year one. However age and standard of written work was not useful in predicting those who left the programme. They concluded that interview scores were not predictive of success in nursing programmes.

Despite the range of selection processes in use, numerous studies have found that the only reliable predictor of success in nursing, medicine and allied health profession pre-registration training is academic grades on admission or Grade Point Average (GPA) (Ari-Itzhak and Kellner 1992, Ehrenfeld et al 1997, Kevern et al 1999, Pitkethly and Prosser 2001, Yorke 2001, Glossop 2002, Last and Fulbrook 2003, Wharrad et al 2003, McCarey et al 2006, Andrew et al 2008, Lysaght et al 2009).

### **Retention**

Studies of retention are hampered by the use of a variety of definitions of attrition (Braithwaite et al 1994, Glossop 2001, Jeffreys 2007). In the UK, one standard definition of attrition has been used fairly widely (Department of Health 2006) although not always consistently.

The literature suggests that the majority of students leave in the first year possibly because they are less 'suited' for nursing, e.g. wrong career choice (Waters 2008). Andrew et al (2008) in a small qualitative study suggested that students who leave thereafter are more likely to do so for personal reasons.

A number of studies of attrition in the general student population (e.g. Johnes and McNab 2005) and in pre-registration nursing specifically (e.g. Wharrad et al 2003) posit academic failure as the principal reason for drop-out. Studies suggest that students are surprised by the academic, theoretical or scientific requirements of

becoming a nurse (Harvey and McMurray 1997, Brodie 2004, Zysberg and Zysberg 2008).

McCarey et al (2006) highlighted that year 1 performance predicted year 3 performance. Therefore if a student was struggling academically in year 1 then they were also likely to struggle in year 3, should they remain. Non-attendance was also found to impact on academic success and therefore, presumably, attrition rates. It may be that identification of risk factors for non-attendance within the selection process could forewarn of underlying difficulties (e.g. personal problems) or alternatively be indicative of poor motivation. The prominence of academic failure as a defining reason for drop-out may be somewhat obscured by the possible tendency of drop-outs to 'blame' other non-academic factors (Harvey and McMurray 1997).

A model using rule induction by Moseley and Mead (2008) based upon age, gender, qualifications, type of nursing, grades and attendance suggested that 31% of those who did drop out could have been predicted at the time of entry. The model focused on factors considered to be highly prevalent in predicting retention/attrition e.g. older age (retention) (Ehrenfeld et al 1997, Prymachuk et al 2009), males (attrition) (Stott 2004, Mulholland et al 2008), and higher Grade Point Average (retention) (Lysaght et al 2003, Stickney 2008, Prymachuk et al 2009).

Ofori (2000) suggests that exam results do not predict success but rather age/maturity does. Houltram's (1996) longitudinal study found that mature candidates were more likely to succeed despite lower academic qualifications on entry. Prymachuk et al (2009) also found that those who were older on entry were more likely to complete the programme. This apparent relationship between maturity and retention may be linked to motivation, persistence and integration. However, Cuthbertson et al (2004) and Waters (2008) suggest that mature students are more likely to leave often due to childcare and elderly relative care difficulties, and cited the time-intensive nature of the curricula as a cogent factor in this finding. Social integration of students may be a factor in attrition (Tinto, 1975, 1987, 1993), with student type and institutional commitment being particularly influential on integration (Bean, 1980; Kotecha, 2002).

There are therefore, a number of factors that either predict or contribute to attrition. However, there may also be a range of reasons why other students confronted with similar difficulties choose to persist with their studies.

Theorists refer to persistence (Berger and Milem 1999, Stage and Hosler 2000), resilience (McAllister and McKinnon 2009), self-efficacy (McGlaughlin et al 2008) and 'belongingness' (Levett-Jones and Lathlean 2009) to describe the characteristics of the student which, through interaction with their specific context, enable them to continue on their course in face of adversity. In a longitudinal study of 350 nursing students, McGlaughlin et al (2008) found occupational self-efficacy was a significant predictor of final marks. They also noted that students with a high psychoticism score were less likely to put effort into the programme, less likely to seek support, and more likely to leave (McGlaughlin et al 2008).

Interventions providing academic support to those at risk of failure: the PLUS program (Lockie and Burke 1999), peer tutoring (Higgins 2004) and addressing learning styles (Hopkins 2008) may also promote continuation. Wilson (1999) identified a link between pastoral support and retention, noting that counselled students are more likely to stay than non-counselled students.



A literature review by Pitt et al (2012) concluded that attrition is related to age, gender, admission qualifications, science course performance through the program, critical thinking skills, support seeking and academic engagement.

Recruitment and selection of pre-registration nursing students needs to marry the (cognitive and non-cognitive) abilities, needs and expectations of potential students with the proposed job/career and the educational/training requirements of the individual institution and its partners. The literature reveals diverse approaches to RSR across nursing and related professions, whilst challenging the evidence-base for some existing practices.

## **THE STUDY**

### **Aim**

The aim of this study was to gather benchmarking data on recruitment, selection and retention practices from all HEIs providing pre-registration nursing and midwifery education in Scotland.

### **Participants**

Key personnel involved in RSR activity were identified by Heads of Nursing and Midwifery at all Scottish HEIs providing pre-registration nursing and midwifery education. Some HEIs provided more than one participant where responsibilities for RSR were carried by a number of different personnel. A total of 18 participants were identified. Whilst there were several programmes within most institutions with varied recruitment and selection practices, responsibility for RSR tended to span across different nursing and midwifery programmes.

### **Data collection and analysis**

A modified version of the benchmarking tool used in a previous study (SGHD 2007) was developed based on a review of the current literature on RSR.

The benchmarking tool formed the basis of semi-structured face to face or telephone interviews. Interviews were recorded, and lasted approximately 1 hour. Prior to the interview, participants were given a list of potential areas for discussion and topics on which background papers or information might be useful. Participants were also asked to be prepared to highlight any particular areas of innovative or successful practice in recruitment, selection and retention at interview. Documentary evidence of the RSR practices was also requested where available.

Interviews were transcribed into note form. A coding sheet was used to aid in transcription. Examples of good practice in RSR were noted and summarised to present a picture of current initiatives and highlight areas of innovative practice. Evidence to support the initiatives was sought and noted where existent. The data from interviews and documents was synthesised and analysed for themes and categories. Analysis of data was fed back to participants in a small number of cases as a validity check.

Face and content validity were assessed with two Heads of Nursing/Midwifery HEI schools/departments. Reliability between interviewers was assessed through consideration of each other's data.

### **Ethical Issues**

Ethical approval was granted by the University of Edinburgh. This approval was often adopted by the host institution, whilst others sought ethics approval through their own ethics committees.

Institutions were not identified by name in any of the reporting although the relatively small number of institutions and their individual profiles and practices may render them identifiable. Identifying data was removed or summarised into other data so that uniquely identifying characteristics were not reported. All institutions were given information to this effect and advised that participation was voluntary with freedom to withdraw at any point. All participants gave formal consent.

## **FINDINGS**

The main findings of the study relating to the three areas: recruitment, selection and retention, are presented below.

### **Recruitment**

Information was generally provided to candidates via the prospectus, web site and a leaflet, and updated annually by the department/school staff. The information was mostly perceived as 'selling' the course/university rather than a career in nursing or midwifery. Some departments/schools had used advertising campaigns on TV and radio via their relevant public relations/marketing colleagues or through commercial companies. One HEI reported having a video on 'you tube' with a direct link to the department/school. Evaluation of the use of different media was subjective and there were conflicting findings of these evaluations from the different HEIs.

Table 1 shows that all HEIs held open days/sessions. These were targeted at a range of markets: school leavers, college students and other graduates. All HEIs also participated in some form of outreach work with either schools or colleges.

During open days and outreach work the information provided was invariably generic. However, most provided programme specific information through presentations and DVDs, and tours of clinical/simulation facilities. Practice Education Facilitators (PEFs), clinical staff and current students were often involved in these days.

*"Open Days are large events – we have students there if we can and a clinical skills set up. Every month we run a drop in information session too so it helps people who have a specific enquiry or if people are changing careers." Lecturer HEI 10*

One HEI had provided transport for candidates from remote areas to visit at special open days.

*"There are things going on and they will bring down a bus load of people. Most of them are interested in medicine or veterinary medicine and law but occasionally we get one for nursing so we'll put something special on for them." Senior Lecturer HEI 5*

The main target for schools work were pupils aged 15 years and upwards. Staff from one HEI had visited a local school and interacted with 11 to 12 year olds using tasks as the focus. Such task-based interactions were commonly used; for example, blood pressure measurement. College outreach work varied and mostly revolved around



those colleges with whom HEIs had working agreements. However two HEIs reported travelling to Ireland to expand their recruitment from Colleges.

Eight HEIs offered some form of university wide summer school, the aim of which was to prepare candidates who had been out of education for a while, or to provide intensive training to bring candidates up to the entrance standard. Those HEIs with summer school reported a recruitment uptake of around 1 or 2 students per year from these.

*"Last year we introduced a health module in the university summer school, but numbers are small. They have to meet the university entrance criteria to get into the summer school though which is all about disadvantaged students." Lecturer HEI 4*

Evaluation of all recruitment activities was however either non existent or negligible, and process rather than outcome oriented.

### **Selection**

Personal statements were reviewed subjectively and used to screen candidates at the point of application. One HEI applied a scoring system but this remained a subjective assessment. Most said they were looking for realistic expectations and the applicant's reasons for choosing nursing/midwifery. However it was not clear what might be a 'good' and what might be a 'bad' reason for choosing.

*"We look at their personal statement for something that talks about their personal ambition to do nursing. There's nothing formalised - it's just really a subjective view on it." Lecturer HEI 9*

Personal statements were used alongside references and academic grades as the sole means of assessments of students in some institutions.

HEIs with higher academic entry requirements and those offering honours programmes had much higher rejection rates, up to 50%, at this stage. Rejection was mostly based on lack of academic qualifications or lack of experience of healthcare or care. Those offering general degree programmes tended to have very low rejection rates at the application and interview stages. Table 2 provides a summary of the type of interviews conducted and refusal and attrition rates in the HEIs.

Views on selection interviews were mixed. Most HEI staff acknowledged the lack of evidence to support their use as a selection tool. However, most valued the interview as an opportunity for sharing information with the candidate rather than as a reliable indicator of subsequent performance.

*"I am totally aware that interviews are not supported by research but the non-adult branches (specialist nursing courses) and midwifery like to interview." Senior lecturer HEI 2*

*"I think interviews are crucial, more as a means of knowledge exchange rather than being able to predict who is going to stay and who might leave the programme." Lecturer HEI 1*

*"We use interviews as a two way communication tool – it's as much about giving information as it is about assessing the candidate". Lecturer HEI 10*

Some were scathing of the value of interviews:

*"Interviews are simply there to satisfy the emotional instincts of the interviewers". Lecturer HEI 6*

Some HEIs had experience of both interviewing and not interviewing (or interviewing only a select few) and argued for no difference in attrition or quality of candidate when interviews were in place.

Rejection rates following interview for many HEIs were low (see table 2). Rejection at interview tended to be higher for Midwifery due to a high ratio of applicants to places. The most common reasons for rejection at the interview stage were a lack of insight or experience and having unrealistic expectations about nursing or midwifery. However some HEIs did suggest that interviews were used to deselect those with apparently low moral and ethical reasoning – those who perhaps held strong radical moral views.

*"I guess they are as good as they can be with all the lists of questions and the like but they're certainly not ideal. Some people seem to think they can 'spot [undesirable people]'. We have questioned the NMC (governing body for nursing and midwifery in the UK) why we still have to interview". Lecturer HEI 1*

The majority of HEIs conducted selection interviews either as a group or individually. There was no strong view on the comparative value of these although some used both in order to assess different aspects of the candidates.

PEFs and practitioners were involved in interviewing in 7 of the 10 HEIs. The perceived motivation for service staff to take part in interviewing was described by one HEI as;

*"wanting to help sort out some of the students who kept coming to their wards who were frankly not up to it and just not motivated enough" Lecturer HEI 4*

However, this HEI reported that service staff then saw how well candidates presented themselves at interview making it difficult for them to reject any. Participants commented that the availability of service staff was variable and unreliable at times, and training limited.

Service users were involved in the selection of mental health nursing students in some institutions. At the point of data collection there were no reported evaluations of this practice. Service user involvement in other areas of nursing and in midwifery was thought to be problematic for several reasons: identifying users and who they represent; training; the use of lay people's time in an unpaid capacity; and a lack of clear role.

Despite the prevalence of interviews for selection there was no evaluation of their validity as a selection tool.

### **Retention**

A range of strategies were used to identify and intervene with students who were non-attenders (see table 3). The most commonly used strategy for identification of non-attendance is the register. Two HEIs took no registers for academic attendance, identifying that, as adult learners, students were responsible for their own attendance. Both universities had smaller cohorts which may make non-attendance more noticeable.

*"We have registers and take them every morning and afternoon when they are in class." Lecturer HEI 4*

*"There is an answering machine so students and mentors can phone in any time to report absence." Lecturer HEI 7*

'KELPIE' (an academic absence monitoring system) was used by one HEI to manage its larger cohorts, with students sent letters either affirming attendance or non-attendance. This system was being evaluated as part of the wider Delivery Group initiative and although embedded by that HEI, the other HEIs who were piloting it did not evaluate the model so positively. Another HEI operated a 'traffic lights' system that facilitated interaction between the student and personal tutor in terms of early indicators of possible failure. No HEI conducted risk profiling at point of selection.

Several HEIs reported increasing numbers of mature (>21years) students in their cohorts. Most considered that it enhanced the cohort, enabling others to settle down into an adult learning environment. However one institution purposefully created peer groups of students coming from feeder colleges rather than a mix of students, arguing they supported each other better.

Most HEIs reported year 1 study skills input including problem-based learning. One HEI felt there had been an improvement in retention since the study skills intervention but there was no data to support this. One institution had extensive, unevaluated, HEI wide systems of 'buddy' support. However, most HEIs reported that buddy systems were poorly used although they were more successful in the smaller cohorts.

The Personal Tutor (PT) role was performed by lecturers, and often cited as key to academic and pastoral support of students. However students who are in need of most support are the ones who fail to seek it was a finding mentioned by several HEIs in the study. Lecturers had a case load of between 15 and 36 students each at any one time with the most common load being around 25. A variety of models were used, as identified in table 4. The impact of these models of pastoral support on attrition/retention were unevaluated.

Measurement of attrition followed various formats making comparison across institutions difficult. The Department of Health (2006) definition was clearly used by one institution but not by all. Most attrition occurred in year 1, with the most common reasons for leaving being 'personal' (to include health, welfare, social and financial). Exit data was collected either by an exit questionnaire or in an interview with the PT or programme leader. The questionnaires were generally developed by the HEI and met their requirements for exit data. The data suggested that there was usually more than one reason for leaving. Students who are failing and subsequently leave, were reported as less likely to complete exit interviews or questionnaires. Reasons for leaving were said to be complex and multi-factorial, and those citing personal problems were often poor attendees and already failing academically.

Attrition rates were varied not only across but within HEIs. Some programmes had much higher attrition rates than others. No clear pattern emerged between the different types of nursing, or in midwifery where initial selection rates were higher. In nursing programmes where the initial rejection rate and rejection rates at interview were higher, there was a tendency for lower attrition. The highest attrition was seen when there was the least selection. This trend did not hold true for midwifery.

### **LIMITATIONS OF THE STUDY**

The study was reliant on HEIs being able to access all relevant data. All HEIs were co-operative and extremely helpful, however some aspects of the data remain incomplete. The data were often difficult to aggregate due to disparate structures and processes in the HEIs and also due to the fact that information was sought across three topic areas – recruitment, selection and retention. Two researchers collated data, hence there may be differences in approaches and interpretation although offset by regular reviews and discussions of data and its analysis. Whilst the study reports the findings of the experiences of HEIs in Scotland, the problem of attrition is an international concern and concurrence with much of the international literature was found when analysing the findings.

### **DISCUSSION**

All HEIs used Open Days and tours and some also were beginning to use current students in recruitment initiatives. However in Hays (2007) review of recruitment strategies in HEIs, he argues that these approaches may disproportionately emphasise the positive aspects of the course and career, potentially creating unrealistic expectations. It has been argued that detailed information about programmes, being a nursing/midwifery student, and the role of nurses/midwives would enable candidates to self-select against set criteria matching both nursing/midwifery and the specific HEI programme requirements (Child et al, 1987). In a review of medical student selection, Benbassat and Baomal (2007) conclude that self-selection could usefully form part of the selection procedure.

Indeed, attempts are now being made in Scotland through the Delivery Group to better inform candidates in Scotland about nursing and midwifery through the pupil placement scheme NHS Education Scotland (2012). HEIs and Service partners in Scotland now also have access to a repository of digital resources based on the central theme of 'Extra-ordinary Every Day' which is focussed on encouraging potential nurses and midwives to reflect on the values, attitudes and capabilities they may need to succeed in these professions in the 21st century Scottish education healthcare context (Sabin et al, 2012)

Personal statements were a requirement for most applicants to nursing and midwifery programmes. However reliance on personal statements as a means of assessment has its limitations alongside concerns about the authenticity of personal statements (Frean 2009).

Several HEIs were attempting to involve service staff with the selection process yet found that service staff often did not have time to attend and/or had inadequate preparation. Their involvement is a requirement of the governing body for nursing and midwifery in the UK (Nursing and Midwifery Council 2010) yet it would still be

possible to meet this requirement by more indirect involvement in the selection process. The UK Nursing and Midwifery Council (NMC) also require the involvement of service user in the process of selection of students. One HEI had service user involvement in selection and several others were considering its introduction. Rhodes and Nyawate (2011) positively evaluated the use of service users in student selection. However the evaluation concerned the process of involvement – the perceptions of the users, candidates and academics of user involvement and not the impact it has on the outcome of the selection process. Stacey et al (2012) argue that service user involvement without supporting evidence underpinning such use, may simply lead to tokenism. Further consideration might be given to NMC requirements for user involvement in selection in order to avoid tokenism. Wider interpretation of this requirement could ensure involvement in a meaningful and helpful way. Service users might also, for example, be involved in engagement days, development of selection criteria and/or recruitment events rather than interviewing candidates.

Interviews for selection were favoured by most HEIs although the rejection rate at interview was often low. Interviewers often seek information previously provided in personal statements, references, and in some cases during the on-site essay writing. Training for interviewers was limited and most used untested scoring systems. Some HEIs used scoring grids in interviews, but none had been subject to reliability or validity testing. All interviews were conducted with full knowledge of the applicants' other information (personal statement, application form including grades etc. and references). HEIs might consider blinding interviewers to all other information to ensure they are not swayed by this. Issues of effectiveness and the considerable variation in models identified in this study are being further researched through a commissioned study due to report in 2013.

No HEI directly identified self efficacy or self concept and the enhancement of this as a strategy for retention. Self efficacy was found to be predictive of retention of students in a study by McGlaughlin et al (2008) and self concept has been shown to have a strong relationship to retention plans with newly qualified nurses in Australia (Cowan et al 2008).

HEIs tended to approach retention by looking at why students left rather than why students stay. Some in apparently similar circumstances may complete on a programme whereas other leave. Most HEIs focused their efforts on enhancing student support. Such an approach is supported by the findings of a study of 458 associate degree nursing students in the United States. Perceived support was found to be related to both academic performance and persistence (Shelton 2012). A literature review of 15 studies was conducted by Cameron et al (2011) focusing on why students stay on programme rather than leave. They concluded that personal commitment and student support were key to retention. However the concept of support was not well defined and there was little evidence to identify which 'support' type of interventions may be effective in promoting retention when students face challenges during their programme. Such approaches might also be balanced by the view of Urwin et al (2010) who propose that some attrition is inevitable and even desirable in order to maintain standards within the profession.

Further study of those who stay and what helps them to stay might be considered in order to provide evidence to put positive mechanisms in to place to help students complete.

## CONCLUSION

Scottish HEIs operate a variety of RSR initiatives. Most are well supported by corporate initiatives to recruit to programmes although, with the exception of the 'Extraordinary Everyday' resources there has been little co-ordination with National bodies to recruit to the professions of nursing and midwifery. HEIs are predominantly concerned with recruiting to the institution and not to the professions. Recruitment initiatives were generally poorly evaluated.

Interviews are widely used, and a requirement of the NMC standards of education (NMC 2010). However, there is no evidence base within the literature that they have predictive validity despite creating scales and scoring systems which remain unvalidated in the main. The use of interviews for information giving may also indicate that HEIs perceive them as a means of supporting self selection.

Some HEIs have dedicated a high level of resource to tackle attrition and support retention. There are few trends in attrition/retention that cut across the HEIs. Whilst the study identified initiatives focussed on addressing attrition/retention, most had not been evaluated often due to the multi-factorial nature of attrition/retention and difficulties with measurement. Improved national data sets, such as those arising from linking Scottish Nursing and Midwifery student data, the Higher Education Statistics Agency (HESA) data and the Scottish Workforce data, may enable modelling and prediction of attrition/retention. Nevertheless all such models are based on historical data and as such are retrospective. None can take into account such dramatic changes as the change in the economic climate which may have an impact on recruitment and retention.

This study highlights the need for a co-ordinated approach to RSR, supporting the development of a robust evidence base through the evaluation of local RSR initiatives, and piloting and evaluation of new strategies. Evaluation strategies must take account of the local context to facilitate transferability of findings across HEIs.



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**Table 1. RECRUITMENT**

	HEI 1	HEI 2	HEI 3	HEI 4	HEI 5	HEI 6	HEI 7	HEI 8	HEI 9	HEI 10
<b>Website and Prospectus</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Marketing</b>	You tube link DVD for mock interviews  Radio campaign (not useful) Targeting redundancy workplaces	DVD for open days/schools  TV ad campaign  Marketing champions – clinical staff who attend open days.	Pens, cards, brochures, plastic bags.  Adverts in metro  FE students can sit in on lectures	Pens, poly bags, bookmarks  Leaflet for open days  DVD for open days/school visits		Recruitment fairs, , Careers conventions	Advertise on radio. Trying out shadowing			
<b>Outreach and Open days</b>	Ad hoc and planned School and FE College visits	Planned and ad hoc open days and visits. Workshops in FE Colleges School visits, now targeting year 2 of senior school.	Planned and ad hoc open days and visits including schools.  Recruit in FE, NHS, shopping centres (stands), from other courses (graduates)	2 open days in June and September	Monthly open visits for schools. Buses provided to remote and rural areas.  Sept/October open days (stall)  Clinical skills 'Taster' sessions	Ad hoc and planned to Schools and Colleges as far as Ireland. Open days	Attend FE open days, visits to schools. Links with Ireland. Open days including clinical skills. Admission drop in sessions	Outreach to schools and skills taster sessions. Open days, ad hoc visits	Outreach visits to schools, Open days at conference centre, campus tours, simulation at open days	Outreach visits, Open days, drop in evening sessions, special one day for FE students entering, visits to FE, Campus tours, skills lab open on visiting days.
<b>Summer school</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes
<b>Evaluation</b>	Very limited	Very limited	Very limited	Very limited		Limited - return rates from FE and Summer camps	Very limited	Very limited	Very limited	Very limited

FE= Further Education College

**Table 2. Rejection at application and interview, conduct of interviews and attrition by HEI**

All data relates to 2007-08

HEI	1	2	3	4	5	6	7	8	9	10
<b>Rejection rate at point of submission of written application</b>	30-50%	-	--	52%	-	9%	Very few	75%	4-19%	5-10%
<b>Interview panel</b>	Academic/PEF	Academic	Academic	Academic, PEF	Academic, PEF	Academic, PEF, clinical staff	Academic, PEF or clinical staff	NA	Academic, clinical	Academic, clinical, users
<b>Individual or Group interview</b>	I	G	I	G	I	I	I	NA	G and I	I
<b>Rejection rate at point of interview</b>	36%	-	-	12%	Very few interviewed	3%	7%	NA	0-14%	10%
<b>Estimated no. of weeks taken to conduct interviews (1 WTE staff effort)</b>	19	12	24	11	1	11	13	1*	40	25
<b>Attrition rate – year 1</b>	-	-	-	9%	4%	18%	24-47%	8%	8 - 27%	11%
<b>Attrition rate over complete programme (latest cohort)</b>	-	-	-	-	13%	-	33%	13%	2- 33%	4 -25%

- no data available    \* Face to face informal meetings

**Table 3. Attendance monitoring**

<b>HEI</b>	<b>HEI 1</b>	<b>HEI 2</b>	<b>HEI 3</b>	<b>HEI 4</b>	<b>HEI 5</b>	<b>HEI 6</b>	<b>HEI 7</b>	<b>HEI 8</b>	<b>HEI 9</b>	<b>HEI 10</b>
<b>Academic attendance</b>	Electronic attendance monitoring system	Register taken spot checks	Register taken spot checks	Register taken and head count.	Timesheets.	Daily register	Register taken	Register taken at clinical skills and tutorials only	No	No
<b>Clinical attendance</b>	Timesheet (mentors complete) spot checks	Timesheet (mentors) Dedicated phone line for absence notification	Timesheets and spot checks	Timesheets Mentors contact HEI	Timesheets – mentors contact HEI	Clinical teaching fellows visit Mentors phone	Dedicated phone line with voice mail for ward staff to report	Record of practice completed by mentor plus mentors phone	Mentor complete record sheet and both mentor and student to phone	Mentor completes record sheet at end of placement. Mentor sometimes phones
<b>Trigger point</b>		Several days absence	<66% attendance	3 lectures missed		80% attendance required				
<b>Action for non attendance</b>	Automatically generated email			emailed to see year co-ordinator		Year tutor follows up	Personal tutor manages	Personal tutor follows up	Personal tutor follows up	

**Table 4. Supporting students with personal tutors.**

HEI	HEI 1	HEI 2	HEI 3	HEI 4	HEI 5	HEI 6	HEI 7	HEI 8	HEI 9	HEI 10
<b>Personal Tutor (academic) group size</b>	15 – 25	Approx 30	25-30 but looking to reduce to 15	15 in total	24 students each	20-30 per year	15-20 students to PT	15-22	30-36, all lecturers	30 students each
<b>Frequency of Personal Tutor meetings</b>	1 x semester (individually)	Once per semester individually Within first 8 weeks and 3 times over year		Formally meet with students 3 times a year	Once per semester	2 x semester	Regular	Each semester	X2 per year	Meet x3 semester
<b>Format of meetings</b>	Single and groups		Mostly group meetings/seminars	Individual, sometimes in groups		groups	group meetings and can meet individually too	Mostly group meetings plus individual	Individual	In groups or individually
<b>Personal Tutor (clinical)</b>	Varied (placement support document)	Personal Tutor and PEFs*	PEFs *	Link lecturers visit once per week	Visit placement once per week	In University for clinical skills plus x1 or 2 in each placement	Personal Tutor monthly	Liaison lecturer visit each month	Liaison lecturers visit once per month nursing and x2 month Midwifery	Link lecturer to each placement but no requirement to visit, can contact through email.

\* Practice Education Facilitator – someone who is practice-based who supports mentors and helps identify learning opportunities